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TO: Paul Pinsky, Chair of Senate Education, Health and Environmental Affairs Committee and Committee Members
FROM: Caitlin Kerr, The Nature Conservancy, Conservation & Climate Policy Analyst; and Kelly Leo, The Nature Conservancy, Maryland Resilient Coasts Program Director
POSITION: Support SB 62 Emergency Management – Chief Resilience Officer – Appointment and Duties

The Nature Conservancy strongly supports SB 62 offered by Senator Hester. SB 62 would establish the Chief Resilience Officer position within the Maryland Emergency Management Agency (MEMA) with the intent of increasing the agency's capacity to take a proactive approach to disaster mitigation and resilience. This new position would be responsible for increasing planning capacity, developing baselines and metrics for success, coordinating state and local responses to climate impacts, incorporating vulnerable private industries into programs and strategies, and identifying and streamlining funding for building resilience. The Chief Resilience Officer would be incorporated into existing state resilience and adaptation building through membership on the Maryland Commission on Climate Change and through involvement in the State Hazard Mitigation Plan development, building from the strong foundation that initiatives like the Maryland Adaptation Framework provide. The position would allow our state and local governments to capitalize on significant changes at the Federal Emergency Management Agency (FEMA) through new funding opportunities aimed at pre-disaster mitigation.

Establishing a Chief Resilience Officer will elevate Maryland among the ranks of the nation's resilience leaders, following the example set by nearly a dozen other states and many more major cities across the U.S., from Virginia to New Jersey, Philadelphia, Louisiana, North Carolina, Oregon, Florida, Colorado, Rhode Island, and Boston, to name a few. Each of these cities and states has established similar positions. As a result, networks already exist to share information about how to maximize resilience by providing cohesive, strategic, and cross-jurisdictional leadership at the necessary scale. This legislation will allow Maryland to access the same benefits for our agencies, state and local governments, vulnerable private industries and communities.

We are already experiencing climate change impacts across Maryland and these will only increase in frequency and severity in the coming years. The most significant threats we are currently experiencing are due to increased sea level rise and erosion, changes in precipitation, including increased frequency of flash floods and storm surge, and increased temperatures. In many places, these issues compound each other. Parts of the state that were susceptible to flooding from past storms now experience nuisance flooding on a far more regular basis, resulting in damaged infrastructure and disruption to emergency services. Increased capacity, resources, leadership, and connectivity between state agencies and local governments is necessary to address these growing threats and local needs.

Here in Maryland, we have already observed one foot of sea level rise since the turn of the 20th century with an additional foot of rise expected by 2050. Localized land subsidence accelerates rates of erosion, thereby compounding the risks from sea level rise. By 2100, studies predict we may see up to three additional feet of sea level rise. The impacts are already being felt in communities across our state. Currently, over $15 billion in property is directly in the path of projected rise. Cities like Annapolis have seen a doubling in coastal flood days over the past decade when compared to the previous one. The latest science tells us that flooding events could more than double in frequency in places like Baltimore as soon as 2035. On the Eastern Shore, Dorchester County is predicted to shrink from the 4th largest county by land area to the 14th by 2100, and saltwater intrusion is already damaging crop yields.

Across the state, coastal flooding currently threatens 81,000 people and, with predicted rise, an additional 38,000 will be in jeopardy by 2050. Sea level rise puts people, property, infrastructure, and critical natural resources at risk with staggering costs to our economy, livelihoods and our very way of life.

Changes in precipitation patterns exacerbate sea level rise impacts but also create different issues in non-coastal areas. More frequent and intense storm events are overburdening critical infrastructure like roads, sewer systems and the electric grid. As a state, we have spent billions of dollars improving our storm and wastewater infrastructure to improve water quality in the Chesapeake Bay. Increased precipitation and storm severity could directly undermine those investments. This exact issue arose after Hurricane Sandy, which caused 84.3 million gallons of sewage to be released into the Bay due to infrastructure damages. Precipitation changes in Western Maryland are making our forests less resilient to pests and pathogens. These issues have human health impacts: we are seeing increases in human disease vectors including ticks and mosquitoes.

Increases in temperature are also harming human health; in Baltimore City, temperatures reach up to 21^{o}F hotter than in surrounding rural areas. By 2050, the city is estimated to experience five times as many dangerous heat days with a heat index over 105^{o}F as we did at the start of the century. These impacts are not limited to cities; across Maryland, we average ten days a year when heat exceeds dangerous levels. This number is predicted to rise to forty days annually by 2050.

Each of these impacts demonstrate Maryland's need for increased services, funding and capacity from the federal, state and local governments. The new position that SB 62 seeks to create within MEMA allows for improved responses, reduced risk, and a pathway for a more proactive and comprehensive approach to mitigating and limiting climate and disaster impacts. Many of the practices and solutions we need to implement require coordination across several agencies and local jurisdictional boundaries. Fortunately, the state already has a multitude of programs in place across many agencies that improve resilience; creating this position in MEMA will expand upon that work and investment by promoting greater incorporation of emergency management perspectives within those projects and programs. This position will also be able to help agencies identify other programs and funding streams across multiple levels of government that can be paired to ensure more equitable access to resilience funding for many of Maryland's frontline, smaller, and most threatened communities.

At the federal level, FEMA is improving funding streams for proactive pre-disaster mitigation. Currently, this is a risk reduction and mitigation strategy that goes widely unfunded in Maryland. Alongside this approach comes new funding opportunities through the Building Resilient Infrastructure and Communities Program. This program allocates 6% of the previous year's expenditures toward building resilience. These funds are awarded through competitive grants and aim to fund large, ambitious projects that address multiple issues. By creating the Chief Resilience Officer in MEMA, we will improve Maryland's ability to access these funds through increasing levels of coordination across the state and codifying a position focused on pre-disaster mitigation.

Due to the overwhelming climate threats to our state, and the increasingly urgent need to move toward more proactive approaches for building resilience, the Conservancy strongly supports creating the Chief Resilience Officer position. Adding the lens of disaster risk reduction to our resilience building projects and programs will not only strengthen and protect our communities, but also lend itself to accessing increased streams of federal funds. Greater capacity will allow state agencies to better recognize opportunities for projects that meet their legislated mandates of promoting clean water and citizen health, while also improving Maryland's ability to adapt and persist in the face of a changing environment.

We commend Senator Hester on introducing this bill, which will strengthen Maryland's approach to disaster mitigation and climate change, protect public health and safety, and generate new capacity, networks, funding, and resources to build a more resilient Maryland.

Therefore, we urge a favorable report on SB 62.